

Crescenta Valley Water District



**FY 2019-20
Budget**





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INTRODUCTION

CVWD

CRESCENTA VALLEY WATER DISTRICT

The District is located in the Crescenta Valley area of Los Angeles County in the foothills of the San Gabriel Mountains, between the San Fernando and San Gabriel valleys. The District provides water distribution and sewage collection within its boundaries to the unincorporated communities of La Crescenta, Montrose, and Verdugo City as well as a small portion of the City of La Canada-Flintridge. The District serves an area of

approximately 4 square miles in relatively steep terrain ranging from 1,200 feet to almost 3,000 feet above sea level. The customer base is primarily residential with some light commercial. The District currently provides water to over 8,000 accounts representing a population of approximately 32,000. Customer growth is steady although the Crescenta Valley area is nearly built-out. Residential growth is occurring through increased housing density in the multiple-unit zoned areas (primarily Montrose) as well as limited in-fill housing development on random parcels in La Crescenta.



The Crescenta Valley Water District was formed as the Crescenta Valley County Water District on December 14, 1950 by the vote of local residents. The newly-formed District purchased the assets and consolidated the infrastructure of several small private water companies then in existence. This was made possible by voter approval of two capital improvement bonds with a value of \$1.35 million. By 1953, with rapid growth in the Crescenta Valley and surrounding foothill communities, it became apparent that the local groundwater supply was not going to be sufficient to meet the increasing demand. Residents from La Crescenta to Altadena voted to form the Foothill Municipal Water District (FMWD) to purchase and distribute imported water from the Metropolitan Water District of Southern California (MWD). By the 1960's, the District was augmenting its local well water with MWD water from the Colorado River and Northern California through the State Water Project.

In the 1979, with federal funds available through the Clean Water Act, the District created two sewer assessment districts and sold bonds for the construction of 64 miles of mainline sewer and 27 miles of house-connection laterals. The project also included the purchase of treatment plant capacity from the City of Glendale and the construction of 7 miles of large-diameter sewer interceptor through the City of Glendale.





INTRODUCTION

CVWD

Board of Directors



James Bodnar
Board President



Judy L Tejada
Board Member



Kenneth R Putnam
Board Member



Kerry D Erickson
Board Member



Sharon S Raghavachary
Board Member

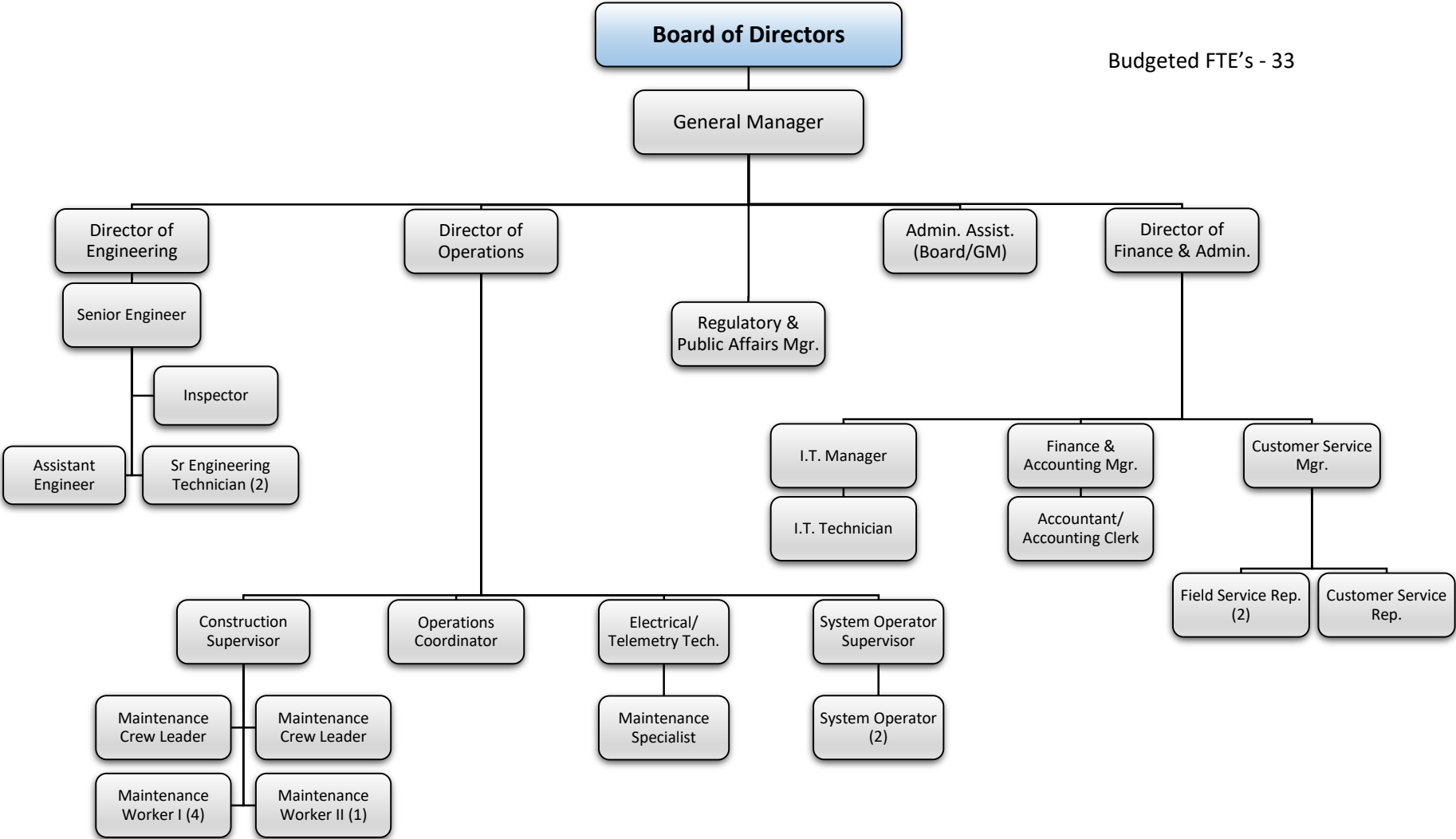
Committees

Executive Committee · Engineering Committee · Finance Committee
Policy Committee · Community Relations/Water Conservation
Committee Employee Relations Committee · Emergency Planning
Committee

General Manager

Nemesciano Ochoa, PE

CRESCENTA VALLEY WATER DISTRICT ORGANIZATIONAL CHART





EXECUTIVE SUMMARY

WATER

CRESCENTA VALLEY WATER DISTRICT

Fiscal Year 2019-2020 Water Budget Executive Summary

Presented herein is the Crescenta Valley Water District's (CVWD) Fiscal Year 2019-20 Water Budget (Budget) adopted by the Board of Directors (Board) on September 10, 2019. The following paragraphs describe the key elements significantly changed from previous years and assumptions that were a part of the budget development process.

The budget proposed for CVWD water operations for FY 2019-20 is guided by the discussion and direction set by the Board in the Spring and Summer of 2019 with review by and comments from the Finance Committee, the Engineering Committee, Department Managers, and public comment. The Budget is based on the continuation of long-term initiatives to maintain system reliability and effectively manage available water resources. The Budget includes funds to continue emphasis on preventive maintenance programs that have been deferred in past years, continue with a meter replacement program designed to meet AWWA standards and reduce water loss, establish a priority list of necessary capital projects, and complete projects to improve and maintain local well production to reduce the amount of imported water purchased.

Water sales have declined in recent years due to the drought and ensuing conservation efforts. The State has long since rescinded its drought emergency declaration, however agencies are now focusing on new water efficiency legislation. Declining water sales, combined with increasing infrastructure replacement cost, has necessitated the use of the District's rate stabilization reserves, which are deployed to mitigate customer rate impacts. Additionally, the MTBE reserve fund has been fully exhausted to maintain the water reserve fund above the target reserve threshold.

Over 20% of CVWD's water distribution system is over 60 years old and is approaching, or has already reached, the end of its useful life. The pipes, wells, pumping plants, reservoirs, and other infrastructure necessary to provide safe, clean water is aging, wearing out, and must be replaced before they fail. In addition to potential system failures, the District would be at risk for increased liability for property damage associated with water main ruptures and leaks.

CVWD has evaluated and identified certain facilities requiring rehabilitation or replacement and has prioritized improvement projects based on criticality to reliable water system operation, risk of failure, and return on investment, particularly in terms of groundwater production. The prioritized capital improvement projects are planned for implementation over several years, beginning with an expenditure amount of \$2.9 million for FY 2019-20.

In recognition of the need for a roadmap to ensure fiscal responsibility and operational resiliency while navigating through statewide issues impacting water districts, CVWD recently completed the 2020 Strategic Plan.

- Fiscal Year 2019-20 Strategic Plan goals:
 - Maintain reliable water and wastewater service;



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- Provide exceptional customer & community service;
- Implement technology efforts to increase efficiency;
- Ensure continued fiscal responsibility;
- Continue protection of public and environmental health;
- Improve regional collaboration and synergy; and
- Development of employer and workforce excellence.

The following are several objectives as they relate to financial management, reporting, and accountability.

- Fiscal Year 2019-20 Budget and Management Goals:
 - Monitor water sales revenue and adjust budgeted expenditures accordingly to maintain water fund reserves within budgeted amounts;
 - Continue prudent practice of activities for operations and maintenance at a moderate level and keep close control of general administrative expenses;
 - Continue with the implementation of a meter replacement program over the next two years to install new meters capable of higher accuracy (register lower flows), thereby reducing “water loss” and associated impact on revenue;
 - Maintain appropriate staffing levels. Evaluate vacant staff positions on a case-by-case basis;
 - Continue Capital Improvement Projects to improve the District’s infrastructure using a “pay-as-you-go” funding method;
 - Maintain water fund reserve levels per CVWD’s policy guidelines;
 - Continue to upgrade the District’s ability to respond to emergencies and enhance reliability;
 - Proactively pursue meeting long-term financial commitments;
 - Continue cost containment and enhancement of financial reporting;
 - Identify cost-recovery or cost-saving measures; and
 - Ensure equitable cost of service.
 - Continue funding the District’s OPEB liability and funding replacement of capital assets in the future.

Revenue Projections:

- Projected water sales for FY 2019-2020 are estimated to be 4,000 acre feet (AF), which is 7.4% greater than the previous year. Actual water production in FY 2018/19 was 3,725 AF. FY 2019-20 revenue is projected at \$12.1 million from water sales and meter charges.
- Staff projected the water supply production for FY 2019-2020 will increase to 4,000 AF as water demand rises as customers return to normal water usage and the economy continues to grow. Staff also anticipates a 2.5% to 3.5% increase in water demand over the next five (5) years.
- CVWD's goal each water year is to realize its adjudicated groundwater rights of 3,294 AF/yr. However, as a result of the 2014–2017 state-wide drought, the District saw a decline in groundwater production and an increase in imported water from FMWD. The amount of groundwater available in the Verdugo Basin declined by an average of 15% per year. With a decrease in groundwater production came a large upturn in the amount of imported water needed to supplement CVWD’s water supply. CVWD saw the amount of imported water increase by an average of 10% per year.



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- The Winter/Spring of 2016/17, saw an above-average rainfall for the season, and staff observed groundwater levels beginning to rise in the spring of 2018 and continuing through 2019. This resulted in an increase in groundwater production from ~1,400 AF in FY 2017/18 to ~1,500 AF in FY 2018/19, which is an increase of 6.1%. There was also another above average rainfall season in the winter/spring of 2018/19, which could result in the groundwater levels further rising in FY 2020 or FY 2021.
- Staff has projected that the trend of rising groundwater production will continue into FY 2019/20, which includes the additional groundwater from the newly completed nitrate removal treatment system at Well No. 2. The projected amount of groundwater produced for FY 2019/20 is ~1,750 AF, which is 16% more than the previous year. At the same time, staff is projecting that the amount of water available from Well 16 to remain at about 220 AF per year. The additional groundwater projected and the increase in overall water demand will result in the amount of water received from FMWD will remain at about the same level as the previous year, while overall demand increased by 7%.
- Projected interest income is budgeted at \$200,000 for the water fund.
- Other projected sources of revenue include developer/connection fees, late fees, new account fees, fire service, meter charges, flooding meters, fire hydrant testing, and other miscellaneous sources totaling ~\$600,000.
- Grant revenue, which is used to fund capital improvement projects, is anticipated at \$300,000.

Expense Projections:

Water operational expense projections for FY 2019-20 is \$9.8 million which is \$693,000 higher than the prior year due to an increase in operating costs which include, purchased imported water, utilities, and disinfecting costs. This number does not include \$2.9 million for Capital Improvement Projects (CIP).

Expense for Purchased Water:

- For FY 2019-20, Metropolitan Water District of Southern California (MWD) will increase the Tier 1 rate for treated water by 2.7% to \$1,078/AF and \$1,165/AF for Tier 2. FMWD, the wholesaler intermediary between MWD and CVWD, recently changed their policy regarding their practice of charging sub-agencies MWD's Tier 2 rates. FMWD's revised policy states that an individual sub-agency will only be assessed Tier 2 if FMWD is assessed Tier 2 by MWD. If FMWD reached Tier 2, the sub-agencies that caused FMWD to go into Tier 2 will pay a respective Tier 2 cost.
- FMWD's operations costs will be increasing by 3.3% in 2020, and FMWD's CIP cost are remaining constant. These cost increases will begin in January 2020.
- CVWD purchased 54% of its overall water supply from FMWD in FY 2019-20 and is projecting to purchase 51% of its overall water supply from FMWD in FY 2019-20.
- A detailed breakdown of FMWD costs are shown in Appendix A - FMWD Cost Analysis.

Compensation and Benefits:

The total cost for compensation and benefits is projected to be \$3.4 million. To prepare the compensation and benefits portion of the FY 2019-20 Budget, staff made the following assumptions:

FY 2019-20 Water Budget Executive Summary



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- Labor:
 - A cost of living adjustment (COLA) of 3.00% per Memorandum of Understanding with Local 1902, AFSCME, the District's bargaining unit
 - Step increases for eligible employees only
 - One vacant staff positions remain unfilled
- Annual Payroll Taxes:
 - State Unemployment/SUI 2.0% of the first \$7,000 per employee
 - Social Security/Medicare 7.65% of earnings
- CalPERS contribution:
 - Rate increased based on the District's annual actuarial valuation report provided by CalPERS
 - New employees hired after January 1, 2013 pay their employee's share beginning on July 1, 2014 per State law
- Workers' Compensation:
 - Modification factor of 0.86 will be decreased to 0.84 by ACWA/JPIA based on approximately five consecutive years of zero lost work-time events; this will decrease the cost of the District's workers' compensation insurance premium
- Group Insurance:
 - Health/Dental 4.73% increase in District portion of costs
 - Vision 0.0% increase
 - Self-Insurance No change from prior year

Water Operations:

Water operations consist of the maintenance of the water production, treatment, storage, and distribution systems and include the water delivery, infrastructure of wells, treatment plants, mains, pumps, reservoirs, meters, and appurtenant structures.

- CVWD's utility workers and system operators keep the water flowing to District customers while ensuring regulatory compliance. CVWD's Director of Operations and 14 staff members work in direct support of this mission.
- In FY 2018-19, CVWD's water distribution maintenance crews performed the following repairs, replacements, installation, and maintenance:
 - Repaired 11 water main leaks
 - Water service laterals – Replacement
 - 65 water service laterals due to leaks from failure of old pipe or improper backfill
 - 20 water service laterals were replaced using a horizontal boring machine, which eliminated the need to replace AC pavement and thereby reducing the overall costs
 - Installed 32 new meter services (D-jobs)
 - Exercised 300 (or 15%) of the system valves in FY 2018-19
 - Cleaned approximately 930 meter boxes
 - Replaced approximately 143 water meters with new IPerl meters



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- The Water Operations and Distribution System budget for FY 2019-20 is \$2.3 million. Staff included in the budget the continuation of water service replacements, which is a part of the water meter replacement program.
- The cost of electrical power needed to operate the wells and booster pump systems decreased overall in FY 2018/19 by 3.8%, which was primarily due to less water demand during the rainy season and CVWD's ability to take advantage of time-of-use (TOU) rates from Southern California Edison (SCE). However, Glendale Water and Power's (GWP) costs increased slightly over the last year. Staff is projecting electrical power costs to increase by 2.0% in FY 2019-20, due primarily to anticipated electrical rate increases from GWP and increased groundwater pumping. Staff will also be working with California Power Alliance on further reductions in power costs based on TOU and other analyses.
- Staff will be making a concerted effort in FY 2019-20 to contain or reduce other operational costs as much as possible in order to minimize the overall impact to the budget as this relates to reduced water demand and revenue.
- CVWD plans on continuing with increased annual maintenance of the water distribution system such as the exercising of water valves, water flushing for water quality, water valve replacement, and leak detection. Also, CVWD will continue its effort with emergency services to replace leaking laterals, mains, and meters as funds and man power allow.

Capital Outlay & Equipment:

Capital outlays planned for FY 2019-20 includes the continuation of upgrades to CVWD's computer network system and site security and an evaluation and masterplan for the main office building.

Water Conservation:

Water Conservation has been, and will continue to be, an element of CVWD's budget. Staff efforts will continue in conjunction with Metropolitan Water District of Southern California (MWD) and the California Water Efficiency Partnership in implementing its water conservation and customer rebate programs and implementing best management practices. The District is on target to exceed its water reduction goals as set forth by state law for 2020. The District and customers' conservation efforts also exceeded the water conservation objective mandated by the State in 2015 and 2016.

- CVWD's goal is to continue with educating the public and promoting water use efficiency.
- CVWD's proactive water conservation initiatives and prior year's expenditures have resulted in a declining water use trend that enabled CVWD to exceed the State mandated target of 24% conservation.

Engineering and Capital Improvements:

The Engineering Department leads in planning and implementing the District's Capital Improvement Program, which is based on a priority of projects needed to maintain CVWD's water infrastructure. The budget for CIP for FY 2019/20 is \$2.9 million.

- Major projects completed in FY 2018-19:



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- 2,800 LF of water main replacement on the 2700, 3000 & 3100 Blocks of Brookhill St
- Rehabilitation of roof, air vents and recoating for Oak Creek #2 Reservoir
- Rehabilitation of Wells No. 1 & 7
- Activate the new nitrate treatment removal system and re-activating Well 2 at the Ordunio Reservoir site
- Design and construction of new ammonia injection system; new site improvements at 2 locations; upgrade to chloramine monitoring system; flushing of water mains to improve water quality; upgrade to SCADA/Telemetry system and personnel training for conversion to chloramines
- Major projects planned for FY 2019-20:
 - Rehabilitation of Wells No. 1 & 14
 - Rehabilitation of roof, air vents and recoating for the Markridge Reservoir
 - 2,800 LF of water main replacement on the 3200 & 3000 Blocks of Brookhill St
 - 800 LF of water main replacement on the 4700 & 4800 Blocks of Pennsylvania Ave
 - Replacement of three (3) booster pumps at the Glenwood Plant
 - Installation of a pressure reducing station between Zones 1 and 2 on Ramsdell Ave
 - Replacement, programming and integration of new SCADA RTU/PLC system (2-year program)
 - Replacement of about 1,000 - ¾" and 1" meters within Pressure Zones 1, 2 & 3 as part of AMI program
 - Planning and design for site improvements at Williams Reservoir
- Additional tasks to be performed by the Engineering Department include: continue working on grant-funding opportunities for various projects, preliminary planning for the stormwater recharge project, updating GIS and hydraulic modeling, preparing developer project procedures, permit coordination, well and booster pump rehabilitation, and other miscellaneous projects.

General Administrative Services:

General administration expenses represent the costs for consultants, accountants, lawyers, IT, conservation programs, conferences, training, and other administrative services.

- In FY 2019-20, CVWD is planning to expend ~\$810,000 for general administration.
- Voice and wireless data communications budgets were decreased to properly reflect actual expenses.
- Staffing - The District's organizational chart shows 33 full-time employees. Filling of vacancies will be evaluated on an individual basis.

Conclusion:

The coming year will present a variety of challenges for Crescenta Valley Water District. The lasting impact of the drought and mandated water conservation has resulted in demand-hardening and reduced water sales revenue over the past five years. In addition, although our groundwater production has increased we are still well below pumping our adjudicated rights, which increases the need for imported water. The District's aging infrastructure presents new challenges in way of operational reliability and fiscal responsibility. The District will need to invest heavily in the replacement of its infrastructure to ensure that reliable and safe drinking water is available for generations to come. The recently completed CVWD 2020 Strategic Plan provides a roadmap to accomplish the District's mission and actualize its vision. Successful implementation of the strategic plan requires



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an ongoing process of planning, execution, measurement and adjustment. Through this cycle of continuous improvement, CVWD can reach its vision of securing sustainable water supplies and ensuring infrastructure reliability, while furthering its commitment to accountability, transparency, and cost-effectiveness.

Special thanks to the Finance and Engineering Committees that worked diligently to provide valuable input in developing the FY 2019-20 Budget.

I also want to express my gratitude to the management staff for their diligent efforts spent preparing this FY 2019-20 Budget.

Submitted by:

Nemesciano Ochoa, P.E.
General Manager



SUMMARY WATER

Estimated Cash Reserves at June 30, 2019

\$ 6,304,981

Revenues: **\$ 12,977,632**

Expenses:

Labor & Benefits **\$ 3,376,264**

Purchased Water **\$ 3,489,868**

Purchased Power **\$ 695,671**

Plant Operations **\$ 577,610**

Distribution System **\$ 907,765**

General & Administrative **\$ 812,663**

Emergency Operations **\$ 12,000**

Capital Outlay & Equipment **\$ 308,370**

Capital Improvements (pay-as-you-go) **\$ 2,877,500**

Depreciation Fund **\$ -**

Future Liability Fund (OPEB) **\$ 100,000**

Debt Service **\$ 550,000**

Total Expenses **\$ 13,707,711**

Net Income (Loss) From Operations 2019-20

\$ (730,079)

Estimated Cash Reserves at June 30, 2020

\$ 5,574,902

Target Reserve Level at June 30, 2019

\$ 3,948,000



FY 2019-20 BUDGET

WATER

CVWD FY 2019-20 Water Budget - Final

Summary of Revenues & Expenses		Proposed Budget 6/25/19	Approved Budget 9/10/19
	Projected FY 2018-19	FY 2019-20	FY 2019-20
Revenue			
Water Sales - Service, Fixed	2,854,433	3,057,267	3,023,931
Water Sales - Metered, Variable	7,870,427	9,456,567	9,141,201
Interest Income - Water Reserve	195,000	200,000	200,000
Interest Income - MTBE Reserve	75,552	-	-
Other Income - Water	138,866	160,000	160,000
Construction Revenues	786,156	452,500	452,500
Total Revenue:	11,920,434	13,326,334	12,977,632
Emergency Funding from MTBE for TTHMs:	1,000,000		
O&M Expense			
Labor & Benefits	3,211,127	3,332,964	3,376,264
Imported Water Cost (Foothill Municipal WD)	3,294,094	3,799,290	3,332,018
Imported Water Cost (Glendale Water & Power)	80,000	157,850	157,850
Power Cost	671,560	732,286	695,671
Operating Cost	1,922,088	2,293,038	2,310,038
Total O&M Expense:	9,178,869	10,315,428	9,871,842
Debt Service	539,645	550,000	550,000
Cash Available for Capital	3,201,920	2,460,906	2,555,790
Capital, OPEB & Other Commitments			
Infrastructure	2,863,798	2,878,000	2,877,500
Capital Outlays & Equipment	173,775	308,370	308,370
OPEB Commitment	100,000	100,000	100,000
Total Capital, OPEB & Other Commitments:	3,137,573	3,286,370	3,285,870
Increase (Decrease) to Cash	64,347	(825,464)	(730,080)
Reserve Fund Balances			
Beginning Balance	2,345,634	6,304,981	6,304,981
From MTBE Fund (Transfer In)	3,895,000	0	0
Re-Payment of MTBE Fund (Transfer Out)	0	0	0
Ending Balance	6,304,981	5,479,517	5,574,901
Target	3,948,000	4,174,000	4,099,000
Above (Below) Target	2,356,981	1,305,517	1,475,901



FY 2019-20 BUDGET

WATER

CVWD FY 2019-20 Water Budget - Final

		<i>Proposed Budget 6/25/19</i>	<i>Approved Budget 9/10/19</i>
<i>Projected</i>			
	FY 2018-19	FY 2019-20	FY 2019-20
Water Revenues			
Water Sales - Consumers	7,352,021	9,054,624	8,752,663
Water Sales - Service Charge	2,780,224	2,978,245	2,945,771
Fire Service Meter Charge	74,209	79,022	78,160
Water Sales - Irrigation	518,406	401,942	388,538
Late Fees/Fire Hydrant Flow/Backflow Tests	71,920	90,000	90,000
Other Income - Water	16,764	10,000	10,000
Other Income - New Accounts	22,364	35,000	35,000
Water Systems Connect Fee	154,795	100,000	100,000
Meter Installation/Hydrant Charges	49,473	50,000	50,000
Grant Revenue	580,142	300,000	300,000
Gain/Loss on Sale of Assets	1,745	2,500	2,500
Gain/Loss on Sale of Investments	-	25,000	25,000
Interest Earned - Water	195,000	175,000	175,000
Interest Earned - MTBE Fund	75,552	-	-
Interest Earned - COP Bonds	1	-	-
Rental Property Income	27,818	25,000	25,000
Total Water Revenue	11,920,434	13,326,333	12,977,632



FY 2019-20 BUDGET

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CVWD FY 2019-20 Water Budget - Final

		<i>Proposed Budget 6/25/19</i>	<i>Approved Budget 9/10/19</i>
<i>Projected</i>			
FY 2018-19		FY 2019-20	FY 2019-20
O & M Expenses			
Compensation			
Director Fees	9,082	9,000	9,000
Officer Salaries	180,992	178,222	175,515
Administrative Services Labor	354,893	363,978	347,981
Administrative Services Labor - OT	5,239	4,500	4,500
Engineering Department Labor	314,852	352,170	352,170
Engineering Department Labor - OT	6,550	3,300	3,300
Plant - Office Labor	233,700	269,609	269,609
Plant - Office Labor-OT	692	500	500
System Operators Labor	290,206	333,765	347,661
System Operators Labor-OT	19,195	16,000	16,000
Utility Workers Labor	422,332	399,471	452,983
Utility Workers Labor-OT	45,865	47,250	47,250
Standby Pay	51,938	47,852	47,852
Auto Allowance	11,564	11,700	11,700
Compensation - Subtotal	1,947,100	2,037,317	2,086,022
Benefits			
Sick and Vacation - Office	123,666	118,298	115,708
Sick and Vacation - Plant	82,444	78,865	77,139
Taxes - Payroll (Total Employees)	145,205	146,513	146,669
PERS Retirement (Total Employees)	381,597	442,275	436,200
Workers' Compensation - Office	20,043	9,199	8,980
Workers' Compensation - Plant	79,191	37,993	38,396
Health and Dental and Vision - Office	159,790	160,828	162,118
Life & Disability Insurance - Office & Plant	11,436	11,940	11,816
Health and Dental and Vision - Plant	132,612	165,535	170,367
Self Insurance	13,071	16,200	14,850
Retiree - Health Care Expense	114,972	108,000	108,000
Benefits - Subtotal	1,264,027	1,295,646	1,290,243



FY 2019-20 BUDGET

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CVWD FY 2019-20 Water Budget - Final

	<i>Projected</i>	<i>Proposed Budget 6/25/19</i>	<i>Approved Budget 9/10/19</i>
	FY 2018-19	FY 2019-20	FY 2019-20
Plant Operations			
Taxes - Property	13,457	18,000	18,000
Glenwood - Plant Maintenance	15,996	26,119	26,119
Glenwood - Landscape	3,923	5,029	5,029
Office Supplies & Misc Expenses - Plant	11,902	10,024	10,024
Glenwood - Utilities	15,712	15,750	15,750
Training - Plant	10,074	9,014	9,014
Education Reimbursement/Certifications	2,633	3,600	3,600
Glenwood - Safety and Security System	17,507	20,553	20,553
Glenwood - Uniforms	12,040	11,836	11,836
Permit & Assessment Fees	3,014	3,000	3,000
Tools and Equipment Maintenance	11,809	15,484	15,484
Nitrate Plant Maintenance	46,891	82,500	82,500
Inventory Disposal	-	-	-
SCADA - Telemetry & Signal	42,791	21,791	21,791
SCADA Hardware	5,700	9,000	9,000
SCADA Software	22,000	23,550	23,550
SCADA - Communications	2,500	1,355	1,355
Lab & Sampling	154,724	125,000	125,000
Lab & Sampling - MTBE	13,418	-	-
Water Quality - Non-Lab & Sampling	-	74,004	74,004
Chlorine & Treatment	70,032	85,000	102,000
Plant Operations - Subtotal	476,123	560,609	577,610



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CVWD FY 2019-20 Water Budget - Final

	<i>Projected</i>	<i>Proposed Budget 6/25/19</i>	<i>Approved Budget 9/10/19</i>
	FY 2018-19	FY 2019-20	FY 2019-20
Distribution			
Backflow Expense	694	700	700
Pipelines - Maintenance	37,946	43,569	43,569
Pipelines - Paving	14,657	15,500	15,500
Pipelines - Fire Hydrant & Fire Service Repair/Rep	5,971	12,000	12,000
Pipelines - Leak Detection/Leak Repair	6,199	28,000	28,000
Pipelines - Trench Plate Rentals	-	2,000	2,000
Pipelines - Water Sampling Stations	3,500	-	-
Pipelines - Valves	-	6,000	6,000
Reservoir - Maintenance	50,184	76,967	76,967
Reservoir - Landscape	17,123	20,000	20,000
Meters - Maintenance	85,093	86,451	86,451
Meters - Paving	100,700	205,000	205,000
Meters - Repair/Replacement/Upgrade	8,902	10,000	10,000
Meters - Lateral Leaks	76,346	85,000	85,000
Meters - Trench Plate Rentals	461	5,000	5,000
Meters - D-jobs	129,278	39,996	39,996
Wells - Maintenance	16,178	50,000	50,000
Wells - Landscape	57,511	7,000	7,000
Wells - Rent	327	300	300
GWP - Land Lease	8,412	16,000	16,000
Booster Pump - Maintenance	18,405	72,000	72,000
Emergency Generators	25,831	22,500	22,500
Auto/Truck - Maintenance	64,823	60,914	60,914
Auto/Truck - Gas	21,211	21,332	21,332
Auto/Truck - Diesel	23,135	21,537	21,537
Distribution - Subtotal	772,888	907,766	907,765



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WATER

CVWD FY 2019-20 Water Budget - Final

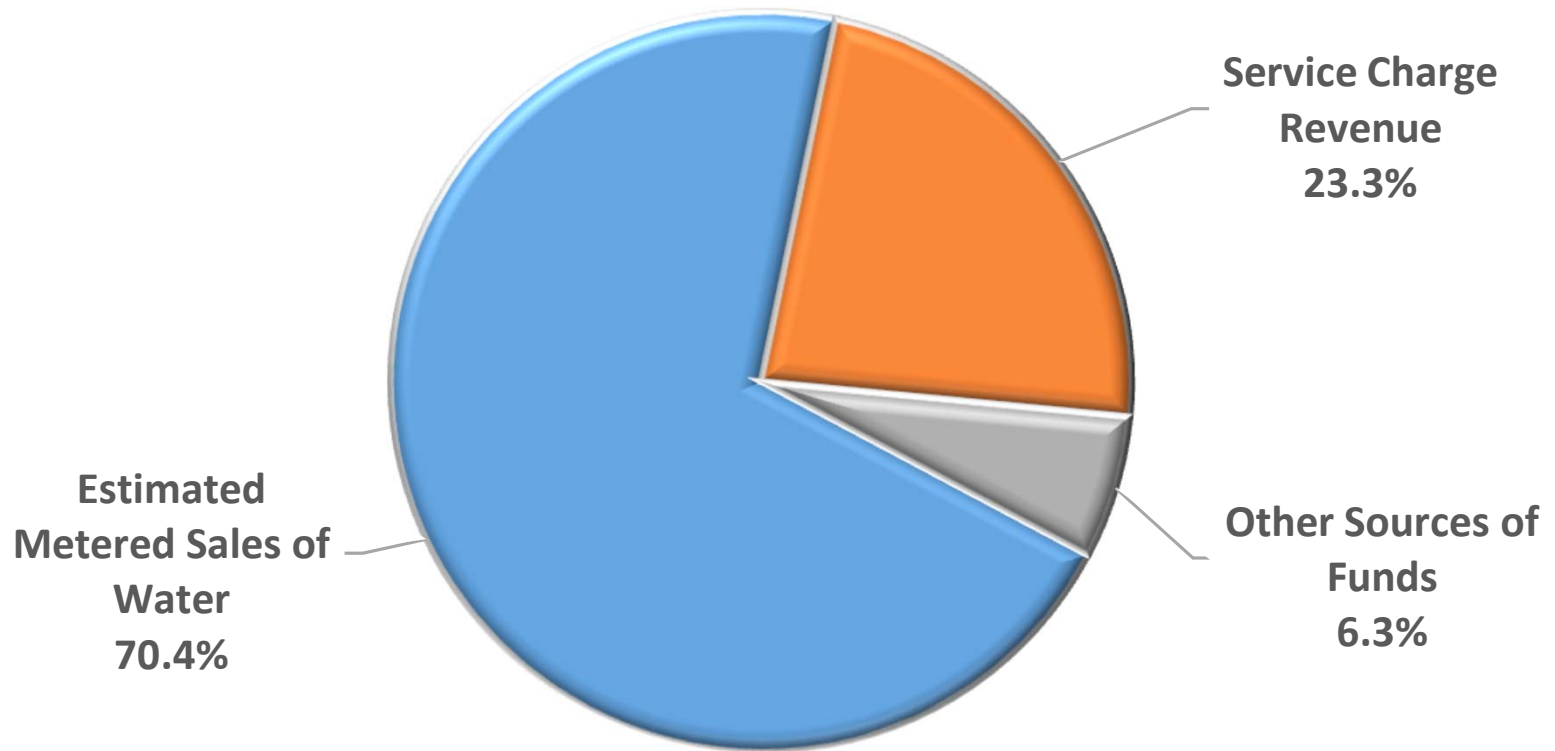
	<i>Projected</i>	<i>Proposed Budget 6/25/19</i>	<i>Approved Budget 9/10/19</i>
	FY 2018-19	FY 2019-20	FY 2019-20
General & Administrative			
General Liability Insurance	50,041	61,200	61,200
Accounting - Audit	6,800	6,750	6,750
Legal Consulting Fees	61,896	90,000	90,000
Administrative Consultants	105,000	186,658	186,658
Office Maintenance	21,603	13,526	13,526
Landscape Maintenance - Office	4,314	11,168	11,168
Office Supplies & Misc Expenses - Office	5,067	5,863	5,863
Computers & Network	22,339	27,000	27,000
Computer Software, Maintenance, Licenses	38,965	50,400	50,400
Utilities - Office	17,360	22,526	22,526
Enterprise Voice Communications	8,560	17,073	17,073
Data Communications - Fiber Lines/Internet	24,892	47,340	47,340
Wireless Voice & Data Communications-cell	52,617	15,724	15,724
Printing, Postage, Stationery, Copier Maint.	43,002	36,000	36,000
Uncollectible Accounts-Water	-	4,302	4,302
Water System Fees (DHS, RWQCB, LAFCO, Misc)	72,211	60,000	60,000
Engineering Department	10,480	9,769	9,769
Water Conservation	11,698	25,500	25,500
Water Conservation - Advertising	4,717	-	-
Conservation - Turf Rebates	-	-	-
Water Conservation - Device Rebates Community	-	5,000	5,000
Outreach	6,373	20,000	20,000
Interns	8,861	5,000	5,000
Training - Office	6,610	10,838	10,838
Conferences and Seminars - Office	11,091	11,904	11,904
Board of Directors - Conferences and Seminars	6,065	2,712	2,712
Misc Administration - Office	5,530	3,495	3,495
Board of Directors - Misc Administration	2,224	2,264	2,264
Membership Renewals/Subscriptions	20,506	25,410	25,410
Bank Charges	31,593	33,000	33,000
Election Expense	58	-	-
Rental Property	605	2,242	2,242
General & Administration - Subtotal	661,077	812,664	812,663
Total O & M Expenses	5,121,215	960,029	960,028
NET WATER INCOME/(LOSS)	124,360	118,998	116,408

Supporting Graphs

Water

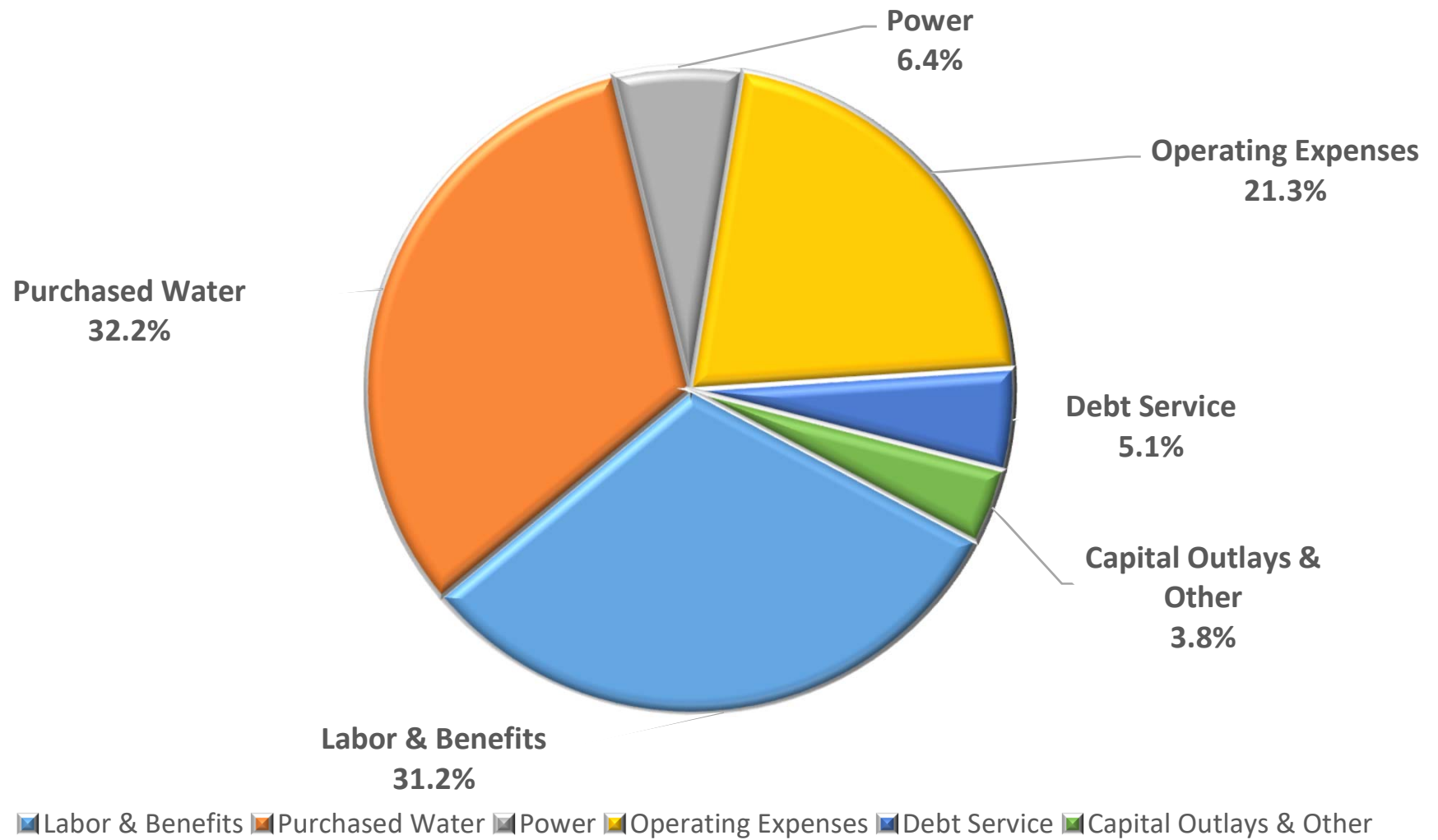


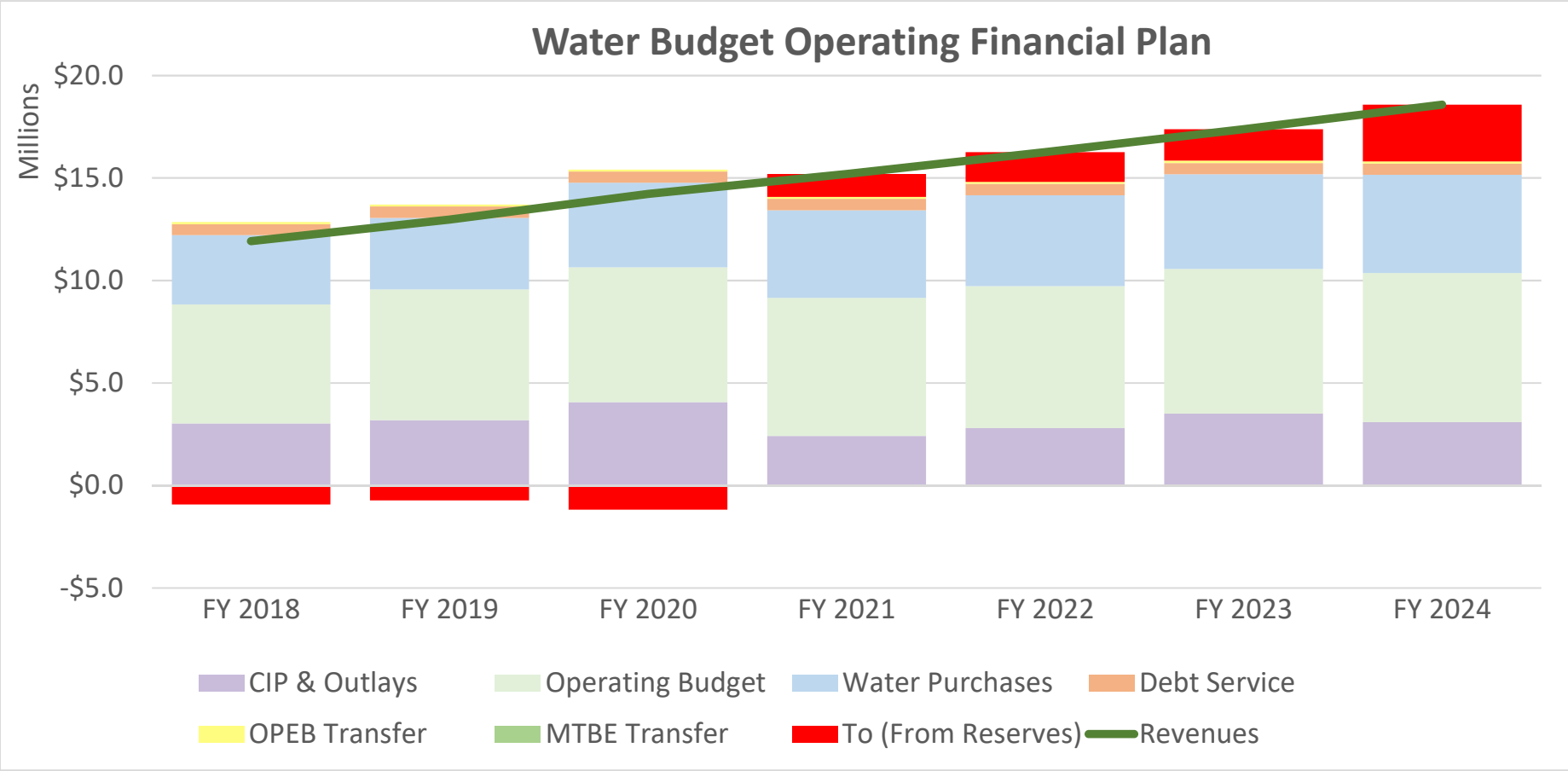
**Budget FY 2019/20 -
Projected Revenue Breakdown**



■ Estimated Metered Sales of Water ■ Service Charge Revenue ■ Other Sources of Funds

**Budget FY 2019/20 -
Projected Expense Breakdown**







EXECUTIVE SUMMARY

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CRESCENTA VALLEY WATER DISTRICT

Fiscal Year 2019-2020 Wastewater Budget Executive Summary

Presented herein is the Crescenta Valley Water District's (CVWD) Fiscal Year 2019-20 Wastewater Budget adopted by the Board of Directors (Board) on September 10, 2019. The following paragraphs describe the key areas where the budget has changed from years past and certain assumptions that were a part of the budget development process. The proposed budget for CVWD Wastewater operations for FY 2019-20 is guided by the discussion and direction set by the Board in the Spring and Summer of 2019. The budget presented here was developed with the assistance of the Finance Committee, Engineering Committee, and Department Managers.

The Wastewater System's primary assets are the 60 miles of collection system which connects each customer to the 6.5-mile Sewer Interceptor pipeline. The Interceptor Pipeline runs through Glendale to Los Angeles, where the wastewater is treated by the City of Los Angeles. The wastewater operating budget is structured to pay for City of Los Angeles treatment and disposal costs that are passed on to the District and to maintain the wastewater system, from camera inspection of the lines to cleaning of the lines.

In recognition of the need for a roadmap to ensure fiscal responsibility and operational resiliency while navigating increasing treatment costs and the need to build reserves for replacement of the collection system and Sewer Interceptor Line, CVWD recently completed the 2020 Strategic Plan.

- Fiscal Year 2019-20 Strategic Plan goals:
 - Maintain reliable water and wastewater service;
 - Provide exceptional customer & community service;
 - Implement technology efforts to increase efficiency;
 - Ensure continued fiscal responsibility;
 - Continue protection of public and environmental health;
 - Improve regional collaboration and synergy; and
 - Development of employer and workforce excellence.

Staff's goals for the FY 2019-20 wastewater budget are:

- Maintain appropriate and necessary spending levels and identify opportunities for expense reductions;
- Plan for increased pass-through of cost increases for City of Los Angeles Wastewater Treatment and capital improvements;
- Actively manage wastewater rates and expenses to maintain target levels of the wastewater reserve funds; and
- Continue funding the District's OPEB liability and funding replacement of capital assets in the future.

Revenue Projections:



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The District completed an updated cost-of-service study in FY 2015-16, which included an evaluation of implementing a variable wastewater rate component which is incorporated into the proposed wastewater rate structure. The variable wastewater rate component is based on sewer flows which are estimated using winter months water use.

Staff calculated the expected monthly service charge revenues from residential, commercial, and school customers based upon 8,132 Equivalent Dwelling Units (EDU's) for FY 2019-20. Wastewater usage charge revenue is calculated based on prior-year winter water use. Total wastewater service and usage charges are budgeted at \$3.3 million for FY 2019-20. Projected wastewater revenues for FY 2019-20 were based on a 4% rate increase in the fixed monthly and usage charges, the first increase in several years, as finalized at the September 10, 2019 Board meeting.

- Staff planned for nominal interest income from the wastewater reserve funds due to current market conditions;
- Other projected sources of revenue include developer/connection fees, late fees, and other miscellaneous sources estimated to total \$37,000, which brings the total anticipated revenue for FY 2018-19 to \$3.2 million.

Expenses for City of Los Angeles Treatment and Disposal Costs:

The City of Los Angeles (LA) has provided CVWD with cost projections for FY 2018-19 through FY 2021-22 based on the cost to treat CVWD's wastewater flow and CVWD's portion of LA's capital improvements.

- Cost projections from LA vary greatly each year, and are projected by LA to increase by an average of 12% per year for the next several years.;
- The annual LA cost is averaged to minimize the wide fluctuations, and the estimated FY 2019-20 cost is \$1.4 million per year for the treatment and disposal of CVWD's wastewater.

Compensation and Benefits:

The compensation and benefits assumptions for the wastewater budget are the same as for the water budget.

Wastewater Operations:

The Wastewater Operations Department was formed in FY 2005-06 and fully staffed in FY 2007-08. CVWD's efforts in cleaning the sewer collection system have resulted in significantly limiting the number of sanitary sewer overflows over the last ten (10) years.

- CVWD's wastewater crews in FY 2018-19 cleaned approximately 26 miles of the wastewater collection systems;
- In an effort to maximize resources and reduce costs, the closed circuit television van (CCTV) inspection program has been scaled back to an as-needed basis. CCTV inspections are utilized when an abnormality is detected during the cleaning process;
- Maintenance was completed on the Sewer Interceptor line which included a full CCTV inspection, cleaning and chemical root foaming where needed;
- The enhanced maintenance areas were cleaned as required by CVWD's Sewer System Maintenance plan;



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WASTEWATER

- Staff performed an updated sewer flow evaluation of the sewer interceptor and modified the brine diverter valve operation;
- The Wastewater Operations Crew did not lose any time to on-the-job injuries, and the wastewater crew was also able to assist the water crew with installation of water service laterals;
- There were no sanitary sewer overflows in FY 2018-19;
- The efforts of videotaping the wastewater system have assisted crews in locating areas of concern and has resulted in identifying sections of main that need rehabilitation;
- The system is now about 34 years old, and staff anticipates the need for minor upgrades to the wastewater collection system in the short term, and major upgrades in the longer term. Staff has requested that a wastewater master plan be performed in FY 2019-20 to assess the needs of the wastewater collection system; and
- The overall Operations and Maintenance (O&M) budget has been set at \$449,000 for FY 2019-20, which is \$38,000 more than budgeted for FY 2018-19.

Capital Outlay & Equipment:

Capital outlay & equipment planned for FY 2019-20 include funds to upgrade CVWD's computer network system and site security and an evaluation and master plan for the main office building. The total for this category is \$64,500 for FY 2019-20, which is \$15,500 lower than in FY 2018-19.

Engineering and Capital Improvements:

The Engineering Department leads the planning and implementation of the District's Capital Improvement Program, which is based on a prioritization of projects needed to maintain CVWD's wastewater infrastructure. The budget for CIP for FY 2019-20 is \$175,000, which is the same as budgeted in FY 2018-19.

- Major projects planned in FY 2019-20:
 - Sewer manhole rehabilitation;
 - Relining of sewer mains identified in the enhanced maintenance area of the collection system and the Interceptor Line;
 - Coating of 6 manholes on the Interceptor Line to repair and reduce cement corrosion;
 - Design and installation of an emergency electrical generator at the Sewer Lift Station;
- Complete audit of the SSMP as required by the SSO-WDR;
- GIS data information input over the next 18 months for the wastewater collections systems, which will assist the District with the SSMP; and
- Develop agreements with neighboring agencies to establish protocols and payment methods for emergency assistance.

General Administrative Services:

The general administrative services discussion for the wastewater budget is the same as for the water budget.



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Conclusion:

The coming fiscal year will present a variety of challenges for Crescenta Valley Water District. The significant annual changes in the City of Los Angeles treatment and disposal costs make it important for the District to be fiscally prepared for such changes by maintaining sufficient reserves. Additionally, the Sewer Interceptor Line may require major maintenance and upgrades as it approaches 40 years in service. That will be a costly project, and the District must begin to build a reserve that will be ready for this heavy investment that will ensure reliable collection and treatment of its customers' wastewater. The District also must remain as efficient as possible in the execution of its mission. The Wastewater Reserve balance is estimated to decrease by \$226,500 in FY 2018-19 and is projected to decrease \$699,000 in FY 2019-20, which in large part reflects the compounding effect of several years of zero rate increases and the increased funding of the District's OPEB liability. The Wastewater Reserve balance is projected to be \$1.4 million above the target reserve amount at the end of FY 2019-20. The recently completed CVWD 2020 Strategic Plan provides a roadmap to accomplish the District's mission and actualize its vision. Successful implementation of the strategic plan requires an ongoing process of planning, execution, measurement and adjustment. Through this cycle of continuous improvement, CVWD can reach its vision of maintaining reliable wastewater service and ensuring infrastructure reliability, while furthering its commitment to accountability, transparency, and cost-effectiveness.

Special thanks to the Finance and Engineering Committees that worked diligently to provide valuable input in developing the FY 2019-20 Budget.

I also want to express my gratitude to the management staff for their many hours spent preparing the FY 2019-20 Wastewater Budget.

Submitted by:

Nemesciano Ochoa, P.E.
General Manager



SUMMARY WASTEWATER

Estimated Cash Reserves at June 30, 2019

\$ 4,813,392

Revenues **\$ 3,342,000**

Expenses:

L. A. Sewer System Charges **\$ 1,426,000**

Labor & Benefits **\$ 1,710,942**

Plant Operations **\$ 74,000**

Collection System **\$ 94,000**

General & Administrative **\$ 281,000**

Capital Outlay & Equipment **\$ 255,000**

Future Liability Fund (OPEB) **\$ 200,000**

Total Expenses **\$ 4,040,942**

Net Income (Loss) From Operations 2019-2020

\$ (698,942)

Estimated Cash Reserves at June 30, 2020

\$ 4,114,450

Target Reserve Level at June 30, 2020

\$ 2,561,300



FY 2019-20 BUDGET

WASTEWATER

CVWD FY 2019-20 Wastewater Budget - Final

Summary of Revenues & Expenses		Proposed Budget 6/25/19	Approved Budget 9/10/19
	Projected FY 2018-19	FY 2019-20	FY 2019-20
Revenue			
Projected user charges	3,291,114	3,327,000	3,305,000
Total permit/connection fee	81,147	36,500	36,500
Interest earnings	540	500	500
Total Revenue	3,373,000	3,364,000	3,342,000
O & M Expense			
City of LA Sewer Service Charges	1,194,533	1,426,000	1,426,000
Sewer Labor & Benefits	1,576,379	1,685,781	1,710,942
Sewer O & M Expense	401,329	449,000	449,000
Sewer CIP & CO Expense	61,109	255,000	255,000
Transfer to Fund OPEB	200,000	200,000	200,000
Total O & M Expenses	3,433,350	4,015,781	4,040,942
Increase (Decrease) to cash	(60,350)	(651,781)	(698,942)
Reserve Fund Balance			
Beginning Balance	4,873,742	4,647,228	4,813,392
Additions (reductions)	(60,350)	(651,781)	(698,942)
Ending Balance	4,813,392	3,995,447	4,114,450
Target	2,485,950	2,564,600	2,561,300
Above (Below) Target	3,433,350	4,015,781	4,040,942



FY 2019-20 BUDGET

WASTEWATER

CVWD FY 2019-20 Wastewater Budget - Final

	<i>Projected</i>	<i>Proposed Budget 6/25/19</i>	<i>Approved Budget 9/10/19</i>
	FY 2018-19	FY 2019-20	FY 2019-20
Wastewater Revenues			
Single family dwelling unit	2,333,445	2,357,613	2,342,553
Multiple family dwelling	788,036	799,506	794,407
Total School charges	122,458	119,462	119,462
Total Commercial user charges	197,175	200,045	198,764
Sewer Service Discount	(150,000)	(150,000)	(150,000)
Sewer Permits	-	4,000	4,000
Late Fees	-	-	-
Sewer Connection Fee (CVWD)	71,847	20,000	20,000
Misc. Revenue	-	5,000	5,000
Rental Properties Income	9,300	7,500	7,500
Interest Earned	540	500	500
Total Revenue	3,372,801	3,363,626	3,342,187



FY 2019-20 BUDGET

WASTEWATER

CVWD FY 2019-20 Wastewater Budget - Final

	<i>Projected</i>	<i>Proposed</i>	<i>Approved</i>
	<i>Budget 6/25/19</i>	<i>Budget 9/10/19</i>	
	FY 2018-19	FY 2019-20	FY 2019-20
O & M Expenses			
Compensation			
Director Fees	9,180	9,000	9,000
Officer Salaries	180,510	181,115	175,515
Administrative Services Labor	290,382	310,382	310,382
Administrative Services Labor - OT	5,233	4,000	4,000
Engineering Department Labor	106,254	157,441	157,441
Engineering Department Labor-OT	2,001	1,400	1,400
Auto Allowance	11,827	10,200	10,200
Plant - Office Labor	65,685	78,333	78,333
Plant - Office Labor-OT	211	-	-
Maintenance Workers Labor	122,448	133,177	133,177
Maintenance Workers Labor-OT	6,010	21,000	21,000
Standby Pay	15,384	14,494	14,494
Compensation - Subtotal	815,125	920,542	914,942
Benefits			
PERS Retirement (Total Employees)	254,974	259,463	290,800
Taxes - Payroll (Total Employees)	96,127	95,601	97,779
Sick and Vacation - Office	43,850	38,690	38,690
Health and Dental and Vision - Office	106,792	101,658	108,079
Retiree - Health Care Expense	62,209	56,338	72,000
Life & Disability Insurance - Office and Plant	7,620	6,571	7,877
Self Insurance	9,080	8,400	9,900
Workers' Compensation - Office	12,635	12,327	5,987
Sick and Vacation - Plant	29,234	25,793	25,713
Health and Dental and Vision - Plant	88,838	110,458	113,578
Workers' Compensation - Plant	49,896	49,940	25,597
Benefits - Subtotal	761,254	765,239	796,000



FY 2019-20 BUDGET

WASTEWATER

CVWD FY 2019-20 Wastewater Budget - Final

	<i>Projected</i>	<i>Proposed</i>	<i>Approved</i>
	<i>Budget 6/25/19</i>	<i>Budget 9/10/19</i>	
	FY 2018-19	FY 2019-20	FY 2019-20
Treatment and Disposal			
Los Angeles ASSSC	1,194,533	1,426,000	1,426,000
Treatment and Disposal - Subtotal	1,194,533	1,426,000	1,426,000
Plant Operations			
Taxes - Property	4,486	4,364	4,364
Glenwood - Plant Maintenance	4,782	8,500	8,500
Landscaping Expense	1,282	4,135	4,135
Office Supplies & Misc Expenses - Plant	13,761	9,000	9,000
Glenwood - Utilities	3,075	5,000	5,000
Training - Plant	3,770	2,650	2,650
Education Reimbursement/Cert. - WW	-	1,000	1,000
Glenwood - Safety and Security System	8,517	8,333	8,333
Glenwood - Uniforms	3,534	3,518	3,518
Tools and Equipment Maintenance	16,519	16,000	16,000
Power - Lift Station	594	750	750
Telemetry & Signal System	13,174	3,308	3,308
SCADA Hardware	-	2,500	2,500
SCADA Software	-	4,333	4,333
SCADA Phone Lines & Radio	-	821	821
Plant Operations - Subtotal	73,493	74,212	74,212
Collections			
Pipelines - Maintenance	1,090	20,364	20,364
Auto/Truck - Maintenance	27,856	37,594	37,594
Auto/Truck - Gas	7,135	6,252	6,252
Auto/Truck - Diesel	6,671	5,891	5,891
Sewer Flow Monitoring Expense	16,900	15,273	15,273
Sewer Camera Van Inspection	1,015	2,618	2,618
Sewer Interceptor - Maintenance	15,647	2,727	2,727
Sewer Lift Station - Maintenance	6,577	3,055	3,055
Collections - Subtotal	82,892	93,773	93,773



FY 2019-20 BUDGET

WASTEWATER

CVWD FY 2019-20 Wastewater Budget - Final

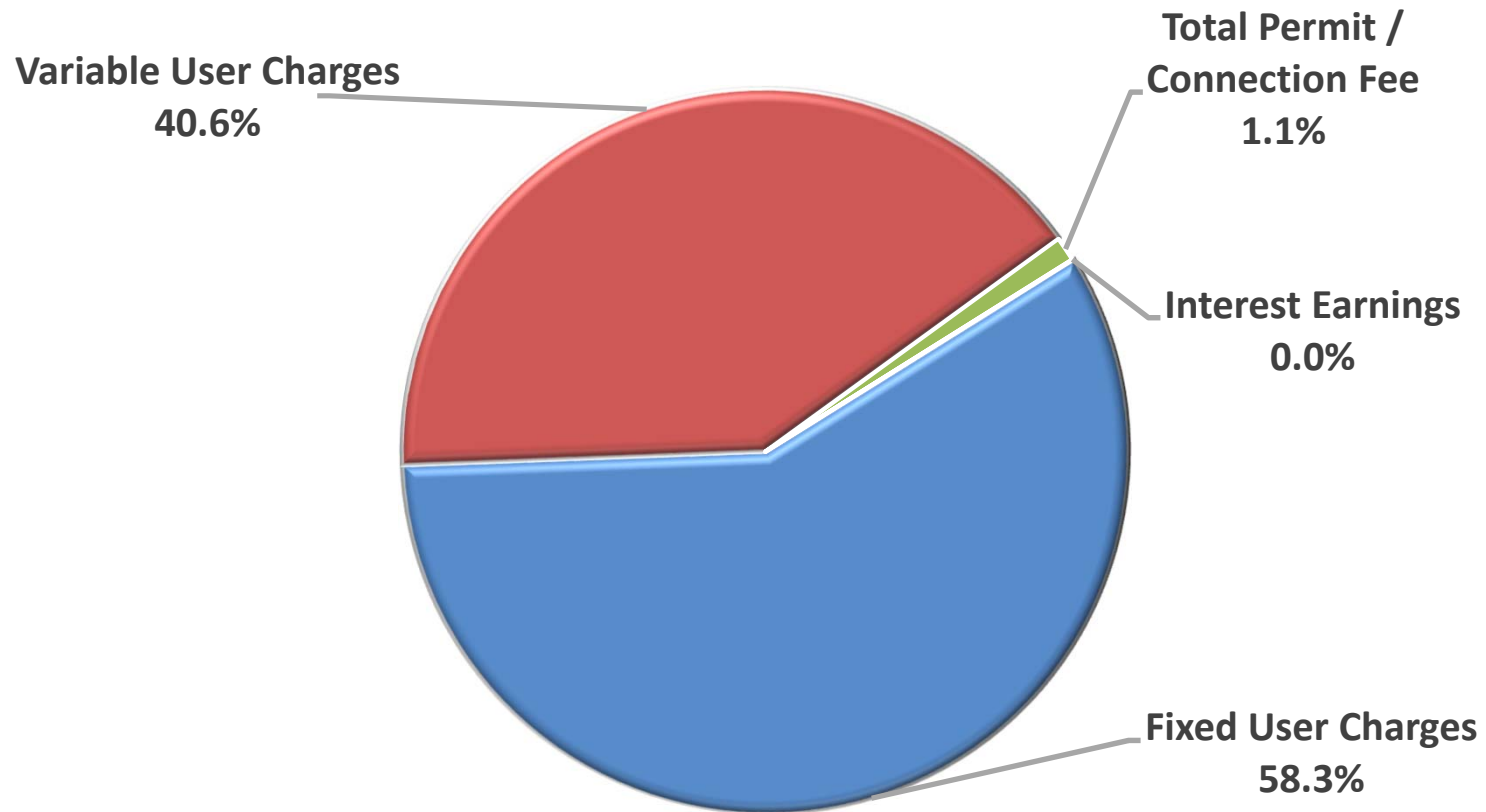
	<i>Projected</i>	<i>Proposed</i>	<i>Approved</i>
	<i>Budget 6/25/19</i>	<i>Budget 9/10/19</i>	
	FY 2018-19	FY 2019-20	FY 2019-20
General & Administrative			
General Insurance (General Liability, Property, F	48,514	52,000	52,000
Accounting - Audit	8,200	7,500	7,500
Legal Consulting Fees	15,058	20,000	20,000
Administrative Consultants	16,737	37,596	37,596
Election Expense	53		
Office Maintenance	6,865	3,969	3,969
Landscape Maintenance - Office	1,448	4,118	4,118
Office Supplies & Misc Expenses	4,775	5,500	5,500
Computers Hardware	7,043	8,333	8,333
Computer Software	-	-	-
Computer Software, Maintenance, License	14,467	17,667	17,667
Utilities - Office	5,991	6,968	6,968
Enterprise Voice Communications - land line pho	2,801	13,419	13,419
Data Communications: Fiber Lines/Internet	17,627	16,333	16,333
Wireless Voice & Data Communications - cell	8,116	4,697	4,697
Printing, Postage, Stationery, Copier Maintenance	36,959	35,000	35,000
Uncollectible Accounts	479	1,300	1,300
Engineering Department	2,955	3,308	3,308
Training - Office	2,214	2,500	2,500
Conferences and Seminars - Office	3,775	2,782	2,782
Board of Directors - Conferences and Seminars	853	1,636	1,636
Misc Administration - Office	1,736	1,700	1,700
Board of Directors - Misc Administration	828	650	650
Membership Renewals/Subscriptions	6,145	8,333	8,333
Bank Charges	31,121	25,000	25,000
Rental Properties Expense	185	850	850
General & Administration - Subtotal	244,945	281,159	281,159
Total O & M Expenses	3,172,241	3,560,925	3,586,086
NET WASTEWATER INCOME/(LOSS)	200,560	(197,299)	(243,899)

Supporting Graphs

Wastewater

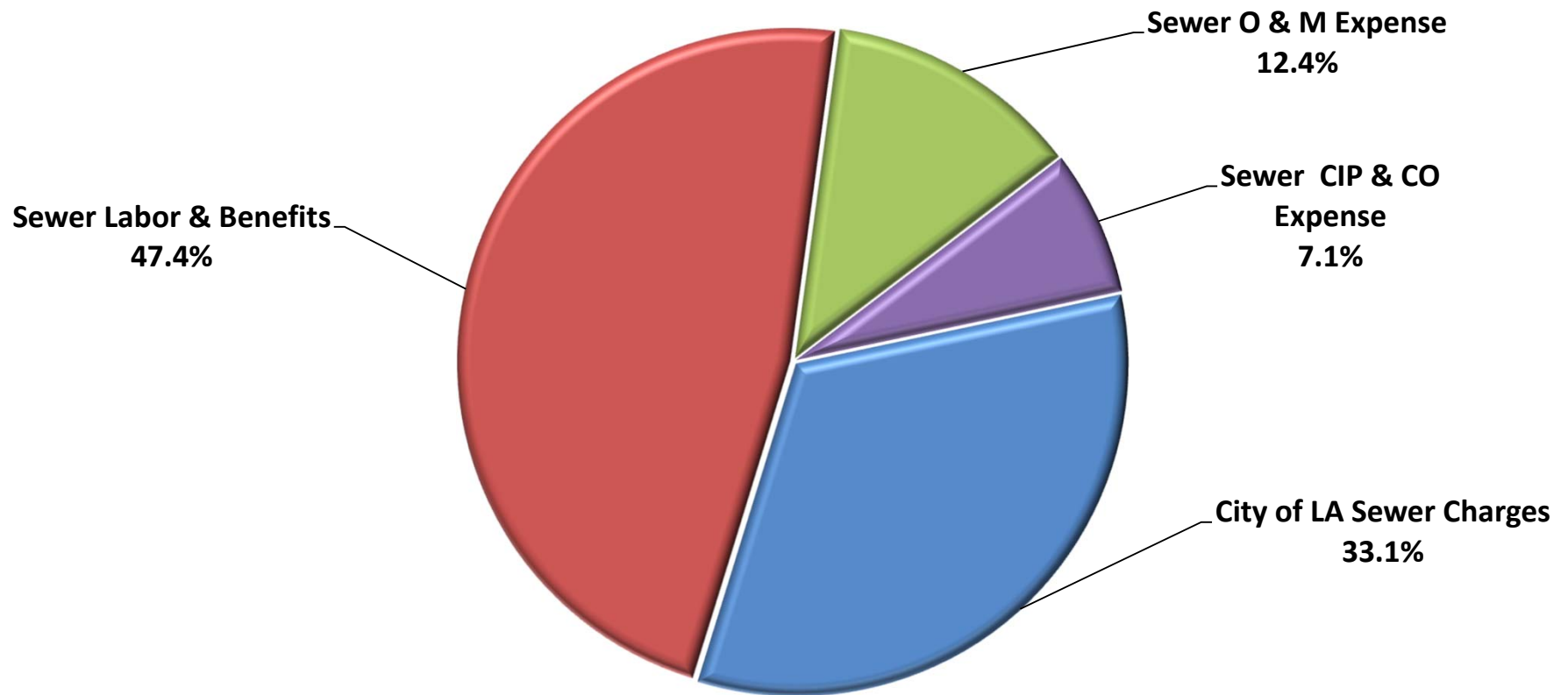


**Budget FY 2018-19
Projected Wastewater Revenue**



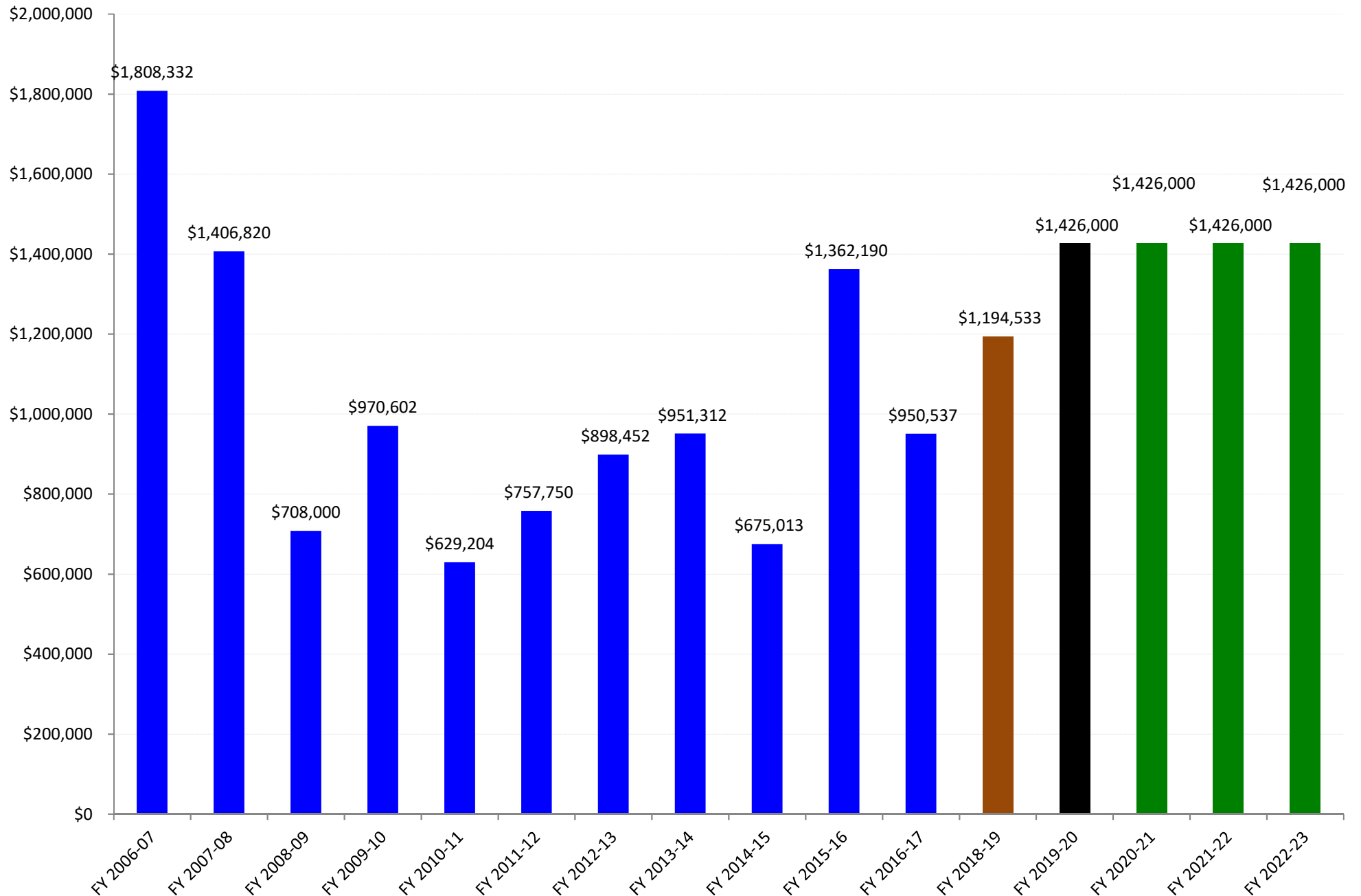
■ Fixed User Charges ■ Variable User Charges ■ Total Permit / Connection Fee ■ Interest Earnings

Budget FY 2019-20 Projected Wastewater Expense



■ City of LA Sewer Charges ■ Sewer Labor & Benefits
■ Sewer O & M Expense ■ Sewer CIP & CO Expense

Summary of City of Los Angeles Treatment & Disposal Costs



Legend: Blue Bars - Recorded Brown Bars - Projected Black Bars - Budget Green Bars - Forecasted

Appendix A

FMWD Cost Analysis

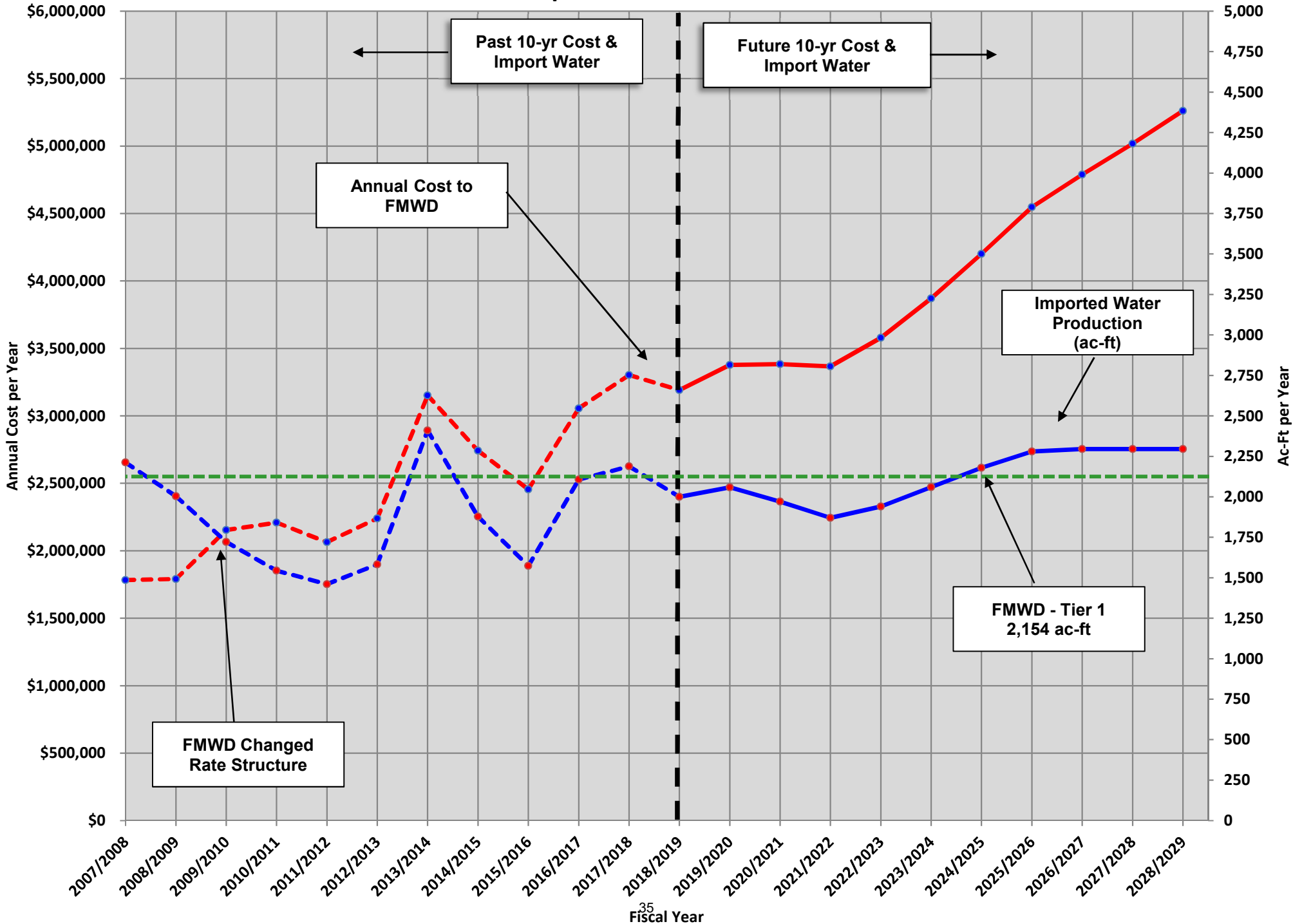


SUMMARY OF PREVIOUS AND PROJECTED FMWD COSTS

Fiscal Year	Total or Projected FMWD Usage (Ac-Ft)	Percent change from previous year	Tier 1 Cost /Ac-ft		Tier 1 Cost percent increase from previous year	Tier 1 Cost	FMWD Operation Monthly Cost	FMWD Power Monthly Cost	FMWD CIP Monthly Cost	FMWD CIP Monthly Cost percent increase from previous year	Tier 2 FMWD Usage (Ac-Ft)	Tier 2 Cost /Ac-ft	Tier 2 Cost	GIC Water Usage (Ac-Ft)	Cost	Capacity Charge	Readiness to Serve Charge	Total Invoice	Total Invoice percent increase from previous year	Avg. Cost /Ac-ft	Avg. Cost/ac-ft percent increase from previous year
2007/2008	2,210	-14%	\$736	\$794	8%	\$1,678,802					128	\$892	\$12,326	0	\$600	\$58,478	\$33,145	\$1,782,751	-4%	\$800	8%
2008/2009	2,000	-10%	\$794	\$930	17%	\$1,693,384					0	\$1,046	\$0	0	\$600	\$52,020	\$45,330	\$1,790,734	0%	\$891	10%
2009/2010	1,718	-16%	\$930	\$1,192	28%	\$1,513,393	\$214,272	\$47,279	\$245,232		0	\$1,215	\$0	85	\$18,531	\$46,902	\$67,164	\$2,153,525	17%	\$1,254	29%
2010/2011	1,542	-11%	\$701	\$744	6%	\$1,104,952	\$399,754	\$204,675	\$353,901	44%	0	\$869	\$0	20	\$4,819	\$48,240	\$97,032	\$2,208,804	3%	\$1,432	12%
2011/2012	1,453	-6%	\$744	\$794	7%	\$1,110,710	\$377,303	\$198,042	\$211,001	-40%	0	\$920	\$0	9	\$2,471	\$48,072	\$116,070	\$2,063,669	-7%	\$1,420	-1%
2012/2013	1,576	8%	\$794	\$847	7%	\$1,285,990	\$381,989	\$203,381	\$204,665	-3%	0	\$997	\$0	6	\$3,704	\$44,664	\$119,004	\$2,239,693	8%	\$1,421	0%
2013/2014	2,409	35%	\$847	\$890	5%	\$2,089,674	\$381,607	\$309,424	\$204,665	0%	0	\$1,032	\$0	0	\$600	\$37,494	\$128,772	\$3,151,636	29%	\$1,308	-9%
2014/2015	1,875	-29%	\$890	\$923	4%	\$1,695,972	\$382,784	\$290,676	\$204,665	0%	30	\$1,055	\$4,288	2	\$1,795	\$28,434	\$135,516	\$2,742,335	-15%	\$1,463	11%
2015/2016	1,573	-19%	\$923	\$942	2%	\$1,463,644	\$392,362	\$228,193	\$204,665	0%	0	\$1,076	\$0	0	\$5,023	\$39,945	\$120,792	\$2,454,524	-12%	\$1,561	6%
2016/2017	2,100	25%	\$942	\$979	4%	\$2,013,000	\$417,562	\$265,675	\$204,665	0%	0	\$1,073	\$0	0	\$600	\$49,058	\$103,326	\$3,055,621	20%	\$1,455	-7%
2017/2018	2,192	4%	\$979	\$1,015	4%	\$2,179,060	\$451,647	\$309,543	\$204,663	0%	55	\$1,101	\$5,123	30	\$16,101	\$43,347	\$95,688	\$3,302,573	7%	\$1,507	3%
2018/2019	1,998	-10%	\$1,015	\$1,050	3%	\$2,052,572	\$484,335	\$306,225	\$204,663	0%	74	\$1,136	\$6,381	0	\$600	\$40,642	\$96,822	\$3,191,008	-3%	\$1,597	6%
2019/2020	2,058	3%	\$1,050	\$1,078	3%	\$2,186,520	\$506,808	\$340,164	\$204,665	0%	0	\$1,165	\$0	0	\$600	\$42,230	\$98,424	\$3,377,210	6%	\$1,641	3%
2020/2021	1,970	-4%	\$1,078	\$1,104	2%	\$2,144,850	\$524,857	\$352,900	\$209,782	3%	0	\$1,195	\$0	0	\$600	\$49,988	\$101,676	\$3,384,053	0%	\$1,718	4%
2021/2022	1,870	-5%	\$1,104	\$1,130	2%	\$2,084,110	\$543,997	\$361,050	\$220,271	5%	0	\$1,196	\$0	0	\$600	\$53,010	\$104,202	\$3,366,639	-1%	\$1,800	5%
2022/2023	1,940	4%	\$1,130	\$1,159	3%	\$2,215,980	\$568,169	\$398,600	\$231,284	5%	0	\$1,258	\$0	0	\$600	\$56,586	\$108,762	\$3,579,380	6%	\$1,845	2%
2023/2024	2,060	6%	\$1,159	\$1,183	2%	\$2,408,420	\$595,447	\$425,000	\$242,849	5%	0	\$1,321	\$0	0	\$600	\$60,706	\$137,850	\$3,870,271	8%	\$1,879	2%
2024/2025	2,180	6%	\$1,183	\$1,242	5%	\$2,634,541	\$629,264	\$449,000	\$254,991	5%	(44)	\$1,387	(\$2,332)	0	\$600	\$64,189	\$169,027	\$4,201,012	8%	\$1,927	3%

FMWD - Annual Cost & Import Water Production - FY 07/08 to FY 28/29

Updated 01/04/19



Appendix B

Capital Improvement Projects



Capital Improvement Project Program FY 19-20 - Date: 9/10/19				E-Job	Recorded FY 16/17	Recorded FY 17/18	Budget FY 18/19	Projected FY 18/19	Budget FY 19/20
1. Water Supply									
A. Groundwater									
i. Well Rehabilitation									
	Well 1 Rehabilitation	E-999					\$ 75,000	\$ 55,315	
	Well 7 Rehabilitation	E-999					\$ 75,000	\$ 90,739	
	Well 11 Rehabilitation								\$ 95,000
	Well 14 Rehabilitation								\$ 95,000
	Well Rehabilitation (2 Wells per year)								
ii. New Wells									
	Re-Activate Well 2 - Design	E-956	\$ 70,895	\$ 99,746			\$ -		
	Re-Activate Well 2 - Construction	E-956	\$ 720,000	\$ 2,001,593			\$ 385,000	\$ 554,961	
B. Imported Water									
	Ocean View - Final	E-733CS-5	\$ -	\$ 43,459			\$ -	\$ 2,819	
C. Groundwater Basin Recharge									
	Storm Water Recharge Study (Grant - Matching Funds)	M-903A	\$ 151,015						
D. Recycled Water System									
WS Total					\$ 1,109,949	\$ 2,293,647	\$ 535,000	\$ 703,834	\$ 190,000
2. Water Storage									
A. Reservoir Rehabilitation									
i. Steel Reservoir Re-Coating/Roof/Vents Rehabilitation									
	Edmund #1 - Roof/Air Vents	E-936							
	Oak Creek #1 & #2 - Roof/Air Vents/Recoat	E-970	\$ 13,689	\$ 502,096			\$ 514,800	\$ 521,593	
	Markridge - Roof/Air Vents/Recoat								\$ 435,000
B. Reservoir Water Quality									
WS Total					\$ 13,689	\$ 502,096	\$ 514,800	\$ 521,593	\$ 435,000
3. Water Distribution									
A. Pipeline Replacement									
	3200 & 3300 Blocks of Brookhill - 1,485 LF								\$ 624,000
	4700 & 4800 Blocks of Pennsylvania -								\$ 515,000
	Annual Pipeline Replacement - 2,700 LF								

B. New Pipelines							
C. Booster Pump System							
i. Annual Pump /Motor Replacement							
	<i>Boosters - Encinal B & C</i>	E-992		\$ 7,021	\$ -	\$ 28,773	
	<i>Boosters - Glenwood 32 & 33</i>						\$ 85,000
E. Miscellaneous Projects							
iii. Misc.							
	<i>Repairs to Ramsdell Mixing Station</i>	E-977	\$ 34,355	\$ 16,737	\$ -	\$ 2,869	\$ 300,000
	<i>Street Rehabilitation - Pennsylvania Ave</i>				\$ -	\$ 88,000	
	<i>Mills Plant - Aeration Tower Rehabilitation</i>						
WD Total			\$ 1,059,709	\$ 752,685	\$ 426,700	\$ 685,579	\$ 1,524,000
4. Water Treatment							
C. Convert to Chloramines							
	<i>Conversion to Chloramination Disinfection</i>	E-995			\$ 1,000,000	\$ 952,792	\$ 125,000
WT Total			\$ -	\$ -	\$ 1,000,000	\$ 952,792	\$ 125,000
5. Technology							
A. Automated Meter Information (AMI) System							
	<i>AMI - Conversion of 3/4" to 4" Meters to Smart Meters</i>						\$ 178,500
B. Supervisory Control and Data Acquisition (SCADA) System							
	<i>SCADA RTU Replace - Equipment & Integration</i>	E-939	\$ 200,000	\$ 13,193			\$ 315,000
TECH Total			\$ 200,000	\$ 13,193	\$ -	\$ -	\$ 493,500
6. Public Safety/Emergency Response							
SF/ER Total			\$ 72,834	\$ 12,689	\$ -	\$ -	\$ -
7. Facilities & Planning							
	<i>Williams Reservoir Site Improvements</i>						\$ 110,000
F & P Total			\$ 68,368	\$ -	\$ -	\$ -	\$ 110,000
Capital Improvement Projects - Total			\$ 2,524,549	\$ 3,574,310	\$ 2,476,500	\$ 2,863,798	\$ 2,877,500
5-Year Capital Improvement Project Summary							
1. Water Supply			\$ 1,109,949	\$ 2,293,647	\$ 535,000	\$ 703,834	\$ 190,000
2. Water Storage			\$ 13,689	\$ 502,096	\$ 514,800	\$ 521,593	\$ 435,000

3. Water Distribution		\$ 1,059,709	\$ 752,685		\$ 426,700	\$ 685,579		\$ 1,524,000
4. Water Treatment		\$ -	\$ -		\$ 1,000,000	\$ 952,792		\$ 125,000
5. Technology		\$ 200,000	\$ 13,193		\$ -	\$ -		\$ 493,500
6. Public Safety/Emergency Response		\$ 72,834	\$ 12,689		\$ -	\$ -		\$ -
7. Facilities & Planning		\$ 68,368	\$ -		\$ -	\$ -		\$ 110,000
Capital Improvement Projects - Total		\$ 2,524,549	\$ 3,574,310		\$ 2,476,500	\$ 2,863,798		\$ 2,877,500